### 7.4 Solving Financial Problems. Determining i and $n$.

## Ex 1:

When Sean was born, his grandparents deposited $\$ 5000$ in an account that pays interest compounded quarterly. No further deposits or withdrawals were made. On Sean's 25th birthday, the amount in the account was $\$ 22$ 160.23. What annual rate of interest did the account pay?

## Ex 2:

Chad invests $\$ 1500$ into a savings account that pays $6 \%$ compounded semi-annually. How long will it take Chad to triple his money?

## Ex 3:

a) How long will it take for money to double at each interest rate compounded quarterly?
b) Is the time cut in half when the interest doubles?
i) $5 \%$
ii) $10 \%$


